

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Potassium chloride
SDS-number : 000000020254
Type of product : Substance
Remarks : Document according to Art. 32 of Regulation (EC) 1907/2006.
In accordance to the Article 14 (1) of the REACH Regulation
(EC) No 1907/2006, exposure estimation and risk
characterisation is not required.

Chemical name : Potassium chloride

CAS-No. : 7447-40-7

REACH Registration
Number : no data available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the
Substance/Mixture : Laboratory chemicals

Uses advised against : none

1.3. Details of the supplier of the safety data sheet

Company	: Honeywell International Inc. 115 Tabor Road 07950-2546 Morris Plains USA	Honeywell International, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
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Telephone :
For further information,
please contact: : SafetyDataSheet@Honeywell.com

1.4. Emergency telephone number

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

Emergency telephone : +1-703-527-3887 (ChemTrec-Transport)
number : +1-303-389-1414 (Medical)
Country based Poison : see chapter 15.1
Control Center

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Not a hazardous substance or mixture.

2.2. Label elements

REGULATION (EC) No 1272/2008

Not a hazardous substance or mixture.

2.3. Other hazards

hyperkalemia Results of PBT and vPvB assessment, see chapter 12.5.

SECTION 3: Composition/information on ingredients

3.1. Substance

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
Potassium chloride	7447-40-7 231-211-8		<= 100 %	N.C.*

N.C.* - Non-hazardous substance - for information only

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

3.2. Mixture

Not applicable

Occupational Exposure Limit(s), if available, are listed in Section 8.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:

Immediately take off contaminated clothing and rinse body with plenty of water. Move out of dangerous area.

Inhalation:

If inhaled, remove to fresh air. Call a physician if irritation develops or persists.

Skin contact:

After contact with skin, wash immediately with plenty of water. If symptoms persist, call a physician.

Eye contact:

Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. If eye irritation persists, consult a specialist.

Ingestion:

When swallowed, allow water to be drunk. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

No data available

4.3. Indication of any immediate medical attention and special treatment needed

No data available

See Section 11 for more detailed information on health effects and symptoms.

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray
Foam
Carbon dioxide (CO₂)
Dry powder

Extinguishing media which shall not be used for safety reasons:

High volume water jet

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. For personal protection see section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so.

6.3. Methods and materials for containment and cleaning up

Use mechanical handling equipment.
Pick for disposal in tightly closed containers

6.4. Reference to other sections

For personal protection see section 8.

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:

No special precautions required.

Advice on protection against fire and explosion:

Normal measures for preventive fire protection.

Hygiene measures:

When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions:

Store in original container. Do not leave vessels/containers open Avoid product residues in/on containers.

7.3. Specific end use(s)

no additional data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
Potassium chloride	Workers / Long-term systemic effects		1064 mg/m3	Inhalation	

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

Potassium chloride	Workers / Acute systemic effects		5320 mg/m ³	Inhalation	
Potassium chloride	Workers / Long-term systemic effects		303mg/kg bw/d	Dermal	
Potassium chloride	Workers / Acute systemic effects		910mg/kg bw/d	Dermal	
Potassium chloride	Consumers / Long-term systemic effects		273 mg/m ³	Inhalation	
Potassium chloride	Consumers / Acute systemic effects		1365 mg/m ³	Inhalation	
Potassium chloride	Consumers / Long-term systemic effects		182mg/kg bw/d	Dermal	
Potassium chloride	Consumers / Acute systemic effects		910mg/kg bw/d	Dermal	
Potassium chloride	Consumers / Long-term systemic effects		91mg/kg bw/d	Ingestion	
Potassium chloride	Consumers / Long-term systemic effects		455mg/kg bw/d	Ingestion	

Component	Environmental compartment / Value	Remarks
Potassium chloride	Fresh water: 0,1 mg/l	

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

Potassium chloride	Marine water: 0,1 mg/l	
Potassium chloride	Sewage treatment plant: 10 mg/l	

8.2. Exposure controls

Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

Engineering measures

Use with local exhaust ventilation.

Personal protective equipment

Respiratory protection:

In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection:

Glove material: Natural Latex

Break through time: > 480 min

Glove thickness: 0,6 mm

Lapren®706

Gloves must be inspected prior to use.

Replace when worn.

Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.

Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.

Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer recommends to use the chemical protective glove in practice not longer than 50% of the recommended permeation time.

Manufacturer´s directions for use should be observed because of great diversity of types .

Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:

Safety glasses with side-shields

Skin and body protection:

Lightweight protective clothing

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	solid
Colour	:	colourless
Odour	:	odourless
molecular weight	:	74,55 g/mol
Melting point/range	:	772 °C
Boiling point/boiling range	:	1.413 °C at 1.013 hPa
Flammability	:	The product is not flammable.
Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No decomposition if used as directed.
pH	:	5 - 8 at 20 °C (as aqueous solution)
Auto-ignition temperature	:	not auto-flammable
Viscosity, kinematic	:	Not applicable

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

Water solubility	:	347 g/l at 20 °C
Water solubility	:	567 g/l at 100 °C
Partition coefficient: n- octanol/water	:	No data available
Vapour pressure	:	No data available
Density	:	ca. 2 g/cm ³ at 20 °C
Bulk density	:	ca. 800 - 1.000 kg/m ³

9.2 Other Information

Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Evaporation rate	:	No data available
Viscosity, dynamic	:	Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

No decomposition if used as directed.

10.3. Possibility of hazardous reactions

None known.

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

10.4. Conditions to avoid

Protect from moisture.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

No decomposition if stored normally.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

LD50

Species: Rat

Sex: female

Value: 3.020 mg/kg

Acute dermal toxicity:

No data available

Acute inhalation toxicity:

No data available

Skin irritation:

Species: Rabbit

Result: No skin irritation

Eye irritation:

Not classified due to data which are conclusive although insufficient for classification.

Respiratory or skin sensitisation:

No data available

Repeated dose toxicity:

Species: Rat, male

Application Route: Oral

Exposure time: 17.520 h

NOAEL: 1820

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

Species: Rat, male
Application Route: Oral
Exposure time: 17.520 h
LOAEL: 110

Carcinogenicity:

Note: Not classified due to data which are conclusive although insufficient for classification.

Germ cell mutagenicity:

Test Method: Chromosome aberration test in vitro
Cell type: Chinese Hamster Lung Cells
Metabolic activation: without metabolic activation
Result: positive
Method: OECD Test Guideline 473

Reproductive toxicity:

Species: Rat, female
Application Route: Oral
NOAEL, Maternal: 310 mg/kg bw/d

Remarks: No data available

Aspiration hazard:

No data available

11.2. Information on other hazards

Endocrine disrupting properties
No data available

Other information:

No data available

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:

LC50
static test
Species: Pimephales promelas (fathead minnow)
Value: 880 mg/l
Exposure time: 96 h

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

Method: OECD Test Guideline 203

Toxicity to aquatic plants:

EC50

Growth rate

static test

Species: *Desmodesmus subspicatus* (green algae)

Value: > 100 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to Microorganisms:

static test

Species: activated sludge

Value: > 1.000 mg/l

Exposure time: 3 h

Method: OECD 209

Toxicity to aquatic invertebrates:

EC50

static test

Species: *Daphnia magna* (Water flea)

Value: 660 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

EC50

static test

Species: *Ceriodaphnia dubia* (water flea)

Value: 630 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

12.2. Persistence and degradability

Biodegradability:

Not applicable

12.3. Bioaccumulative potential

No data available

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:

Dispose according to legal requirements.

Packaging:

Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:

Provisions relating to waste:

EC Directive 2006/12/EC; 2008/98/EEC

Regulation No. 1013/2006

For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number

ADR/RID:Not dangerous goods IMDG:Not dangerous goods IATA:Not dangerous goods

14.2 UN proper shipping name

ADR/RID:Not dangerous goods

IMDG:Not dangerous goods

IATA:Not dangerous goods

14.3 Transport hazard class(es)

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

14.4 Packaging group

14.5 Environmental hazards

ADR/RID: no

Marine pollutant: no

14.6 Special precautions for user

No data available

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Basis	Value	Remarks
Directive 2012/18/EC		Not applicable
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of $\geq 0.1\%$ (w/w).

Poison Control Center

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+35929154233
Croatia	(+3851)23-48-342
Cyprus	+357 2240 5611
Czech Republic	+420224919293; +420224915402
Denmark	82121212

Country	Phone Number
Liechtenstein	+41 442515151
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	+356 2395 2000
Netherlands	030-2748888
Norway	22591300
Poland	+48 42 25 38 400

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	+30 210 779 3777
Hungary	(+36-80)201-199
Iceland	5432222
Ireland	+353(1)8092166
Italy	0382 24444
Germany	Berlin : 030/19240
	Bonn : 0228/19240
	Erfurt : 0361/730730
	Freiburg : 0761/19240
	Göttingen : 0551/19240
	Homburg : 06841/19240
	Mainz : 06131/19240
	Munich : 089/19240
Latvia	+37167042473

Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	+386 1 400 6051
Spain	+34915620420
Sweden	112 (begär Giftinformation);+46104566786
Switzerland	145
United Kingdom	(+44) 844 892 0111

Other inventory information

US. Toxic Substances Control Act
On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended
On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)
On the inventory, or in compliance with the inventory

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)
On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Further information

All directives and regulations refer to amended versions.
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:

EC European Community
CAS Chemical Abstracts Service
DNEL Derived no effect level
PNEC Predicted no effect level
vPvB Very persistent and very bioaccumulative substance
PBT Persistent, bioaccumulative und toxic substance

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.
This information should not constitute a guarantee for any specific product properties.

Potassium chloride

31248-1KG

Version 1.5

Revision Date 17.12.2022
